CISC 404/604 homework assignment 9.

Each exercise is worth 10 points.

1. Exercise 77 on page 87 of Schöning book. The term "disentangled" is defined at the top of page 87.

2. Exercise 80 on page 87 of Schöning book.

3. Exercise 83 on page 94 of Schöning book.

4. Exercise 86 on page 96 of Schöning book.

5. Let  $\Theta = [x/f(g(y)][y/u][z/f(y)], \sigma = [u/y][y/f(a)][x/g(u)], F = P(x,f(y),g(u),z)$ . Let u be the disentangled version of  $\Theta\sigma$ . Show that  $F(u) = (F\Theta)\sigma$ .